



STATEMENT OF BASIS
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 BAQ Air Permitting Division

Company Name:	Vulcan Construction Materials LLC, Fairfield Quarry	Permit Writer:	Mareesa Singleton
Permit Number:	1000-0046-CA	Date:	DRAFT

DATE APPLICATION RECEIVED: April 30, 2020

FACILITY DESCRIPTION (SIC CODES/NAICS CODES): (1423/212313): The facility is a 550 tph crushed stone aggregate mining facility.

PROJECT DESCRIPTION: Construction permit for the installation of a new 550 tph crushed stone processing plant at a greenfield site. The plant will consist of crushers, screens conveyors, bins, and three (3) exempt diesel powered pumps (dewatering, creek, and process pond) (exempt per exemption B(ii)(a) of the BAQ Exemption list updated May 24, 2019).

SOURCE TEST REQUIREMENTS: Emission unit IDs 01, 02, and 03 required to source test in accordance with 40 CFR 60.11 and 40 CFR 60.675.

SPECIAL CONDITIONS, MONITORING, LIMITS: PSD avoidance limit of less than 250.0 TPY for PM and Title V avoidance limit of less than 100.0 TPY for PM₁₀.

PROJECT EMISSIONS						
Pollutant	Uncontrolled		Controlled		PTE	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
PM	74	323	6.2	27	74	<250.0
PM ₁₀	27	117	2.2	10	27	<100.0
PM _{2.5}	4.2	18.5	0.3	1.4	4.2	18.5
SO ₂	0.6	2.5	--	--	0.6	2.5
NO _x	0.6	2.7	--	--	0.6	2.7
CO	1.9	8.2	--	--	1.9	8.2
VOC	0.7	3.0	--	--	0.7	3.0
Total HAP	9.93E-04	4.75E-03	--	--	9.93E-04	4.75E-03

FACILITY WIDE EMISSIONS			
Pollutant	Uncontrolled	Controlled	PTE
	TPY	TPY	TPY
PM	323	27	<250.0
PM ₁₀	117	10	<100.0
PM _{2.5}	18.5	1.4	18.5
SO ₂	2.5	--	2.5
NO _x	2.7	--	2.7
CO	8.2	--	8.2
VOC	3.0	--	3.0
Total HAP	4.75E-03	--	4.75E-03

OPERATING PERMIT STATUS: This is a new facility. This construction permit will be rolled over into the General Conditional Major Permit for Nonmetallic Mineral Plants.



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REGULATORY APPLICABILITY REVIEW	
Regulations	Comments/Periodic Monitoring Requirements
Section II.E – Synthetic Minor	Applicable: The facility is requesting a TV avoidance limit of less than 100.0 TPY of PM ₁₀ and a PSD avoidance limit of less than 250.0 TPY of PM.
Standard No. 1	Not Applicable: The facility does not have any fuel burning sources.
Standard No. 3 (state only)	Not Applicable: This process does not contain waste combustion or reduction sources.
Standard No. 4	Applicable: Section VIII: PM limit as detailed below. Section IX: All sources shall not exhibit an opacity greater than 20%. Section X: The facility is subject to this section for all non-enclosed operations.
Standard No. 5	Not Applicable: The facility does not have potential VOC emissions of more than 550 pounds in a day or more than 150 pounds in an hour.
Standard No. 5.2	Not Applicable: The dewatering, creek, and process pond pumps each meet exemption (B)(3) of the standard (NOx emissions less than 5.0 TPY, each).
Standard No. 7	Not Applicable: The facility is not one of the 28 source categories; therefore, its major source threshold is 250.0 TPY. The facility's potential to emit for any PSD pollutant is less than 250.0 TPY; thus, the facility is not major for PSD.
61-62.6	Applicable: The facility shall develop and implement a Department approved facility wide fugitive dust control plan.
40 CFR 60 and 61-62.60	Applicable: Subpart A: The facility is subject to this Subpart. Subpart OOO: Emission Unit IDs 01, 02, and 03 are subject to this Subpart. Not Applicable: Subpart IIII: The facility dewatering, creek, and process pond pumps are not stationary sources. Subpart JJJJ: The facility does not have a stationary spark ignition internal combustion engine.
40 CFR 61 and 61-62.61	Not Applicable: This facility does not contain sources subject to this standard.
40 CFR 63 and 61-62.63	Not Applicable: Subpart ZZZZ: The facility dewatering, creek, and process pond pumps are not stationary sources.
61-62.68	Not Applicable: This facility does not store or use chemicals subject to 112(r) above the threshold quantities.
40 CFR 64 (CAM)	Not Applicable: Not a Title V facility.



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Explanation of Synthetic Minor Limits

Permit ID	Equipment ID	Permit Issue Date	Pollutant	Emission Limit (TPY)	Explanation
CA	All	DATE	PM	<250.0	PSD Avoidance
CA	All	DATE	PM ₁₀	<100.0	Title V Avoidance

Standard No. 4 Allowable

Process	Process Weight Rate (tons/hr)	PM Allowable (lb/hr)	Uncontrolled Emissions PM (lb/hr)	Controlled Emissions PM (lb/hr)	Monitoring
Aggregate Mining	550	70.1	74	6.2	Operation of the wet suppression systems in accordance with the permit

AMBIENT AIR STANDARDS REVIEW

Regulations	Comments/Periodic Monitoring Requirements
Standard No. 2	The emissions are below the exemption thresholds. See modeling summary dated June 4, 2020.
Standard No. 7	This is not a PSD project. See modeling summary dated June 4, 2020.
Standard No. 8 (state only)	No St. 8 pollutants are emitted from processes subject to this standard. See modeling summary dated June 4, 2020.

PUBLIC NOTICE

This construction permit(s) will undergo a 30-day public notice period, in accordance with SC Regulation 61-62.1, Section II.N and, to establish synthetic minor limits.

ADDITIONAL PUBLIC PARTICIPATION

SUMMARY AND CONCLUSIONS

It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.